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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|------------------------|---------------------|------------------|
| 10/540,548 | 02/22/2006 | Kris Vandermeulen | 31118/DY0206 | 7189 |
| 4743 7590 12/09/2009 MARSHALL, GERSTEIN & BORUN LLP 233 SOUTH WACKER DRIVE 6300 SEARS TOWER CHICAGO, IL 60606-6357 | | | | |
| EXAMINER MARINI, MATTHEW G | | | | |
| ART UNIT 2854 | | PAPER NUMBER | | |
| MAIL DATE 12/09/2009 | | DELIVERY MODE PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/540,548

Applicant(s)

VANDERMEULEN ET AL.

Examiner

MATTHEW G. MARINI

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-54 is/are pending in the application.
- 4a) Of the above claim(s) 21-24 and 40-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-39, 53 and 54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB-06)
Paper No(s)/Mail Date 10/15/09
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 25, 27, 29, 31, 32, 36, 53 and 54 are rejected under 35 U.S.C. 102(b) as being anticipated by Hilton et al. (EP 0 903 237).

With respect to claim 25, Hilton et al teaches in Fig. 1 a printing apparatus using a consumable, 12, associated with an identifier, 25, the apparatus comprising: a printer mechanism, 14, for printing an image onto an image receiving substrate; a reader, 27, for reading the identifier, 25; a storage medium, 43, capable of holding a list of any previously used identifiers associated with empty consumables, Col 9 lines 41-45; and a processor, 42, arranged to compare the identifier, 25, read by the reader, 27, with the list of any previously used identifiers associated with empty consumables, i.e. when the current count of sheets becomes zero, the processor generates an invalid indication, i.e. "empty cartridge" if there is a match, Col. 11 lines 5-28, wherein the invalid indication includes an internal control signal created by the processor, 42, which at least causes an error message, i.e. "Order New Cartridge" to be displayed on a display of the printing apparatus, Col. 11 lines 8-11.

With respect to claim 27, Hilton et al teaches in Fig. 1 a printing apparatus wherein the storage medium, 43, is capable of holding a table comprising a plurality of identifier fields associated with respective status fields regarding the remaining sheet counts left in the specific ink cartridges.

With respect to claim 29, Hilton et al teaches in Fig. 1 a printing apparatus wherein the processor, 42, is capable of loading into one of said identifier fields an identifier read by the reader, 27, which does not match a previously used identifier as to updated the sheet count.

With respect to claim 31, Hilton et al teaches in Fig. 1 a printing apparatus further comprising a usage monitor for monitoring the usage of the consumable, Col. 8 lines 33-48.

With respect to claim 32, Hilton et al teaches in Fig. 1 a printing apparatus wherein the processor, 42, is capable of updating the status field to indicate the amount of consumable, i.e. ink, remaining based on the usage monitored by the usage monitor, Col. 8 lines 33-48.

With respect to claim 36, Hilton et al teaches in Fig. 1 a printer mechanism, 14, for printing an image onto an image receiving substrate; a reader, 27, for reading the identifier, 25; a storage medium, 43, for holding a list of any previously used identifiers associated with empty consumables, Col 9 lines 41-45; and a processor, 42, arranged

to compare the identifier, 25, read by the reader, 27, with the list of any previously used identifiers associated with empty consumables, i.e. when the current count of sheets becomes zero, the processor generates an invalid indication, i.e. "empty cartridge" if there is a match, Col. 11 lines 5-28, wherein the invalid indication includes an internal control signal created by the processor, 42, which at least causes an error message, i.e. "Order New Cartridge" to be displayed on a display of the printing apparatus, Col. 11 lines 8-11.

With respect to claim 53 and 54, Hilton et al teaches in Fig. 1 a printer mechanism, 14, wherein the storage medium, 43, comprises a column of unique identifier fields, i.e. stored numbers, one or more corresponding status fields, i.e. the current loaded cartridge numbers, Col. 11 line 35 to Col. 12 line 17, and capable of storing a blacklist of numbers of empty cartridge, including the list of any previously used identifiers associated with empty consumables, Col. 12 line 45 to Col. 13 line 56 and seen at Steps 104-108.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 26, 28, 30, 33-35, and 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hilton et al. (EP 0 903 237) in view of Klinefelter et al. (WO 00/43932).

With respect to claims 26, Hilton et al. teaches all that is claimed in the above rejection of claim 25, but teaches contact pads as the reader rather than an RF coil.

Klinefelter et al. teaches in Fig. 2 a similar printing apparatus where an RF coil, 42, is used to read an identifier off a consumable, i.e. ribbon cassette, 14.

Because both Hilton et al. and Klinefelter et al. teach structure used for reading an identifier off a consumable, it would have been obvious to one of ordinary skill in the art at the time of invention to substitute the contact pads of Hilton et al. with the RF coil of Klinefelter et al. where both achieve the predictable result of reading an identifier.

With respect to claim 28, Hilton et al teaches in Fig. 1 a printing apparatus wherein the storage medium, 43, is capable of holding a table comprising a plurality of identifier fields associated with respective status fields regarding the remaining sheet counts left in the specific ink cartridges.

With respect to claim 30, Hilton et al teaches in Fig. 1 a printing apparatus wherein the processor, 42, is capable of loading into one of said identifier fields an identifier read by the reader, 27, which does not match a previously used identifier as to updated the sheet count.

With respect to claims 33-35, Hilton et al. teaches all that is claimed in the above rejection of claim 25, but fails to teach the consumable being a supply of an image thermal receiving substrate, where the usage monitor comprises an end of substrate detector.

Klinefelter et al. teaches in Fig. 2 a similar printing apparatus where the consumable is a supply of an image thermal receiving substrate, where an end of substrate detector, 50, is used to detect an end of the substrate.

Because both Hilton et al. and Klinefelter et al. teach structure used for reading an identifier off a consumable, it would have been obvious to one of ordinary skill in the art at the time of invention to substitute the consumable with another where both types of consumables achieve the predictable result of forming an image on a substrate.

With respect to claims 37-39, Hilton et al. teaches all that is claimed in the above rejection of claim 36, but fails to teach the consumable being a cassette in which comprises a spool of the thermal image receiving substrate.

Klinefelter et al. teaches in Fig. 2 a similar printing apparatus where the consumable is a cassette, 14, in which comprises a spool of the thermal image receiving substrate.

Because both Hilton et al. and Klinefelter et al. teach structure used for reading an identifier off a consumable, it would have been obvious to one of ordinary skill in the art at the time of invention to substitute the consumable with another where both types of consumables achieve the predictable result of forming an image on a substrate.

Response to Arguments

Applicant's arguments filed 8/28/09 have been fully considered but they are not persuasive.

Regarding applicant's arguments of claim 25, specifically EP '324 does not disclose a storage medium for holding a list of any previously used identifiers associated with the consumables and a processor arranged to compare the identifier read by the reader with the list of any previously used identifiers, the examiner respectfully disagrees. The memory and processor taught in EP' 324 is more than capable of performing the recited function language insofar as recited structure is concerned. The processor is capable of comparing one value against another in determination if the install cartridge is proper, where there is a corresponding message displayed indicating to a user that determination.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the prevention of printing with previously used cartridges so that cartridges are not re-filled with non-test material so preventing damage to the printer) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding applicant's arguments of claims 26, 28, 30, 33-35 and 37-39, specifically how WO' 932 does not teach a list of previously used consumables to validate its use and generating an invalid indication if there is a match, the examiner

would like to point out that WO' 932 is used to teach an RF coil, where the list is taught by EP '324 as discussed above.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **MATTHEW G. MARINI** whose telephone number is (571)272-2676. The examiner can normally be reached on Monday-Friday 8:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571)-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Matthew Marini

/Judy Nguyen/
Supervisory Patent Examiner, Art Unit 2854